

334-1233A

11 John Road
Sutton, MA 01590



AQUATIC CONTROL TECHNOLOGY

POND AND LAKE MANAGEMENT SPECIALISTS

Phone: (508) 865-1000
FAX: (508) 865-1220
e-mail: info@aquaticcontroltech.com
Internet: www.aquaticcontroltech.com

RECEIVED

MAR 29 2013

CONSERVATION COMMISSION

Date: March 25, 2013
To: Bill Turner, Westford Conservation Commission
From: Michael Lennon, Biologist
Re: **Project Completion Report- Nabnasset Lake (2012)**

This following is a summary of management activities performed by Aquatic Control Technology (ACT) at Nabnasset Lake in 2012. Management continues to focus on the control of non-native invasive species, namely curlyleaf pondweed (*Potamogeton crispus*) and variable watermilfoil (*Myriophyllum heterophyllum*).

Consistent with previous years the determination of areas to be treated in 2012 was made jointly based on survey work and plant mapping supplied by ESS, input from the Nabnasset Lake Preservation Association (NLPA) and the results of our pre-treatment plant survey performed on May 26th.

Treatment with Reward (diquat) herbicide was performed on June. Treatment targeted approximately 30 acres of curlyleaf pondweed growth in the main basin of the pond. No treatment was performed in Shipley Swamp. Prior to treatment formal notification of the proposed treatment date was provided to the Westford Conservation Commission and lake residents.

Treatment was performed using an 18' foot airboat equip with a specialized pump sprayer. The concentrated Reward herbicide was mixed with lake water in an onboard mixing tank and applied subsurface using weighted hoses. An on-board GPS unit was used to provide real-time tracking of the treatment craft to ensure even distribution of the herbicide in the designated treatment areas.

Treatment was performed by ACT's MA licensed applicators in accordance with the Order of Conditions (# 334-1233/1233A) and the MA DEP License to Apply Chemicals (#12110) issued for this project. The treatment proceeded smoothly without incident. No adverse impacts to fish or wildlife were observed or reported following treatment.

Post-treatment survey work performed by ESS reported excellent control of targeted curlyleaf pondweed growth.

While repeated treatment with a contact herbicide like Reward has proven to reduce cover of curlyleaf pondweed and milfoil, it is difficult, if not impossible, to completely irradiate an unwanted species once it has been established in a given waterbody. While we expect reduced distribution and density with each successive year of treatment we do anticipate that some form of management will be required annually to maintain desirably low cover of non-native plants in Nabnasset Lake.

We recommend that the NLPA continue with monitoring and maintenance treatments for the control of curlyleaf pondweed and milfoil, as necessary. Additionally we have recommended that the NLPA plan to monitor water clarity regularly so that early response can be taken in the event of another algae bloom like the one experienced in 2012. We also recommended that the Association budget additional funds for performance of a spilt-treatment with copper (CuSO₄) algaecide should nuisance conditions develop again this summer, requiring treatment.

Please do not hesitate to contact our office if you have any questions.